METAL PICTURE FRAME WITH DUST COVER

Field of the Invention

This invention relates to metal picture frames and, in particular, to a metal picture frame adapted to retain a dust cover on its rear surface.

Background of the Invention

A metal picture frame in common use today comprises four extruded aluminum sections which are mitered and secured together by corner pieces which function as expansion clamps. Each corner pieces are L-shaped with each leg receivable within a channel in the back of a section of the frame. The corner piece includes a pair of set screws which are accessible from the back of the frame and can be tightened by the framer to clamp the sections together.

It is frequently desirable to attach a dust cover, usually made of paper, to the back of a frame. Ordinarily the dust cover can readily be attached adhesively to the back of a frame, but in the case of a conventional metal frame as described above, it is difficult to attach the dust cover to the back of the

frame because there is only a relatively small area to which the dust cover can be adhered. Moreover, because of the dimensions of the frame section, it is difficult to apply an adhesive tape to the back of the frame using conventional adhesive tape guns.

It is an object of the invention to provide a metal frame comprising extruded frame sections which greatly facilitates the attachment of a dust cover to the back of the frame.

The Drawings

Figure 1 is a view of a corner of a metal frame assembly showing how two frame sections are held together;

Figure 2 is a perspective view of the corner of an assembled frame with a dust cover in accordance with the invention; and

Figure 3 is a sectional line along the line 3-3 of Figure 1 showing the invention.

Detailed Description

A picture frame comprises four frame sections 12 preferably extruded from aluminum. The frame sections 12 have identical cross sections and, as shown in Fig. 1, include an inwardly directed supporting flange 14, an outer wall 16 and a receiving channel 18. The receiving channel 18 is

rectangular in cross section and includes two opposed lips 24 which are spaced apart to define a gap 25 extending the length of each section.

The ends of each section are mitered as illustrated at 26 and adjacent frame sections are joined together at their mitered ends and secured in place by a corner piece 28. The corner piece 28 includes an L-shaped screw plate 30 and an L-shaped backing plate 32. Screw plate 30 includes two threaded holes, one in each leg, which receive set screws 34. Tightening of the set screws 34 forces the plates 30 and 32 apart thereby clamping the adjacent frame sections 12 together.

The gap 25 between the edges of the lips 24 at the back of the frame sections is necessary to provide access to the set screws 34 to tighten the corner piece. In the prior art constructions, the gap between the lips 24 was relatively wide and provided only a small region to which a dust cover could be adhesively attached. Moreover, in applying a dust cover to a picture frame, it is highly desirable to use commercially available adhesive tapes which can be applied by conventional tape guns. With conventional metal picture frames, the gap 25 between the lips 24 was so wide that standard width tapes could not conveniently be used because they would contact only one of the two lips.

In accordance with the invention, the width of each of the lips 24 is increased to a level which will enable a standard width tape to be applied to both lips 24, while providing sufficient clearance for the set screws 34 so that the legs of the corner piece can be easily and quickly inserted into the receiving

channel 18. It has been discovered that satisfactory results can be achieved if the clearance between each set screw 34 and the edge of each lip 24 is .010 inches with optimum results when the clearance is .005 inches.

In accordance with a preferred embodiment, a double-sided adhesive tape 40 (3M 924 adhesive tape provided by 3M Corporation) is applied to both lips 24 after the frame is assembled. This tape is ½ inch wide and comes in rolls. The tape can be dispensed by means of an ATG 700 applicator also from 3M. Because the gap 25 between lips 24 is substantially less than ½ inch, for example, about .245 inches, it is easy for a professional framer to apply the adhesive tape 40 to both opposing lips 24 of each frame section after the frame has been assembled. A dust cover 42 is then simply adhered to the adhesive coating on the exposed surfaces of the lips 24.